ORDER NO. VRD8912M163

Service Manual

Exploded Views / Parts List

Panasonic

Stereo Microphone for Movie Cameras

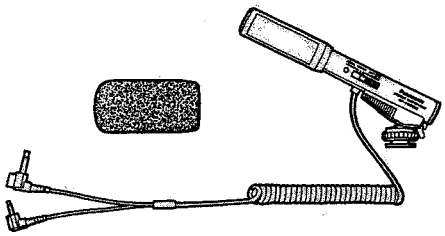
RP-VMS65E

Super Directional Microphone For Movie Camera

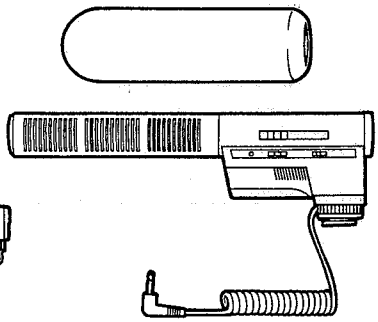
RP-VM70E

Zoom Microphone for Movie Camera

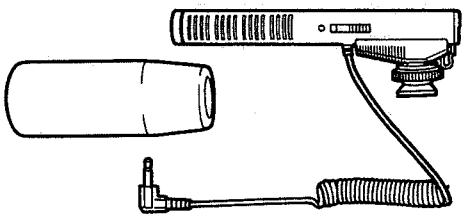
RP-VM130E



RP-VMS65E



RP-VM130E



RP-VM70E

ITEM	SPECIFICATIONS		
	RP-VMS65E	**RP-VM70E**	**RP-VM130E**
Type	Stereo microphone with electret condenser	Secondary Sound Pressure Gradient Microphone with Back Electret Condenser Unit	Secondary Sound Pressure Gradient Microphone with Back Electret Condenser Unit
Directionality	Unidirectional	Super Directional	Super Directional
Frequency response	100–15,000 Hz	100–10,000 Hz	50–13,000 Hz
Sensitivity	−68 dB (1,000 Hz, 0 dB=1 V/μbar)	−52 dB (HI: 1,000 Hz, 0 dB=1 V/μbar) −64 dB (LO: 1,000 Hz, 0 dB=1 V/μbar)	−52 dB (NARROW: 1,000 Hz, 0 dB=1 V/μbar) −64 dB (WIDE: 1,000 Hz, 0 dB=1 V/μbar)
Output impedance	600Ω	600Ω	LOW
Equivalent noise	Less than 35 dB SPL	Less than 36 dB SPL	Less than 36 dB SPL
Battery Power supply	One UM4/R03/LR03/AAA size 1.5 V, or 5 V from an external power source	One UM4/R03/LR03/"AAA" size	One UM3/R6P/LR6/"AA" size
Power consumption	Approx. 2 mA	Approx. 2 mA	Approx. 3 mA
Battery life	Approx. 450 hours (at 20°C)	Approx. 450 hours (at 20°C)	Approx. 700 hours (at 20°C)
Weight	Approx. 60 g (including battery and cord)	Approx. 50 g (battery and cord inc.)	Approx. 115 g (battery and cord inc.)
Cord	2 core (for audio output and power input), shielded coiled cord, 3 mm in OD, approx. 20 cm in length.	Single-core, shielded curl cord, ext. dia. 2 mm, length 20 cm,	Single-core, shielded curl cord, ext. dia. 2.3 mm, length 20 cm,
Audio output plug	L-type mini stereo (3.5 mm in dia.) (fitted with power input plug holder)	with L-type miniplug (dia. 3.5 mm)	L-type miniplug (dia. 3.5 mm)
Power input plug	L-type super mini plug (2.5 mm in dia.)	———	———
Accessories	windscreen ..... 1 battery 1	Wind Screen ..... 1 Battery 1	Wind Screen ..... 1 Battery 1

●Design and specifications are subject to change without notice.

Panasonic

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

MODEL NO: RP-VMS65E

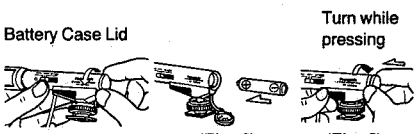
OPERATING INSTRUCTIONS

FEATURES

- Small and compact microphone especially for stereo recording use with small movie cameras.
- Floating structure for the reduction of vibration noise.
- Low-cut switch position for the reduction of wind noise and windscreen for the prevention of wind rumble on the microphone.
- Battery check function which indicates remaining battery power.
- Battery operated or powered from a movie camera, depending on the video equipment (some movie cameras can supply power).
- Ball joint system for easy movement of the microphone in various directions (upwards or sidewards). Ideal for use when the direction of the audio source and the scene being shot are in different locations. Convenient for recording narration. This system prevents damage to the mounting parts when the microphone is hit accidentally during shooting.

BATTERY INSTALLATION

1. Hold the battery case lid tight and then turn it in the direction of the arrow (←OPEN) to remove the lid (Fig. 1).
2. Install an UM4/R03/LR03/AAA size battery in the battery case by first inserting its positive terminal in the case (the indication on the inside of the battery case lid is the negative terminal) (Fig. 2).
3. Reinstall the battery case lid by reversing the removal procedure (Fig. 3).
4. It is not necessary to install a battery when the microphone will be powered from a movie camera. (If the microphone is connected to a movie camera and also a battery inserted in the microphone, power will be supplied from the movie camera.)



(Fig. 1) (Fig. 2) (Fig. 3)

ATTACHING THE MICROPHONE TO A MOVIE CAMERA

1. Loosen the threaded knob by turning it in the direction of the arrow (Fig. 4).
   The indication ↑ FRONT is on the base of the mounting foot.
   Slide the mounting foot in the accessory shoe of the movie camera with the arrow pointing in the direction of the camera lens (Fig. 5).
2. Secure the microphone to the movie camera by turning the threaded knob in the direction of the arrow (Fig. 6). If the microphone is attached to the movie camera in this way, it will be in the locked position with the microphone head pointing to the front.
3. Plug the microphone audio output plug (mini stereo plug—the larger one, 3.5 mm in diameter) in the movie camera's mic jack "Mic" (Fig. 7) (Be sure to unplug the audio output plug from the mic jack "Mic" when not using the microphone. Otherwise, the movie camera's built-in microphone will not function.)

USING THE MICROPHONE

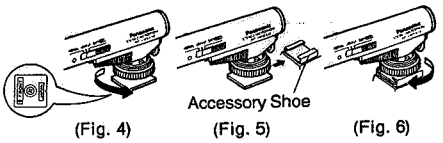
1. Use of the windscreen

The windscreen prevents rumbling wind noise when shooting outdoors. Place it over the head case so that the microphone head is completely covered.

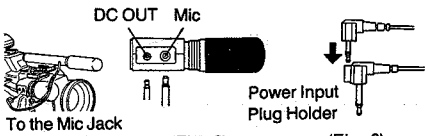
2. Use of the Power/Low-cut Switch

- To use the microphone, set this switch to the Normal position. If the microphone is not in use, make sure to switch it off.
  In a windy location, if the wind noise can not be reduced with the windscreen, set the switch to the Low-cut position.
- The microphone will function as soon as it is connected to and powered from the movie camera, even if the power switch is in the OFF position ensuring that sounds are picked up. In this case, the microphone will operate in the normal mode.
- If this switch is set from OFF to Low-cut, the red battery check indicator will flash for a second (Fig. 10). If it does not, it indicates that the battery has run out. In this case, replace it with a new one.

4. If you wish to supply power from the movie camera, plug the power input plug (the smaller one; 2.5 mm in diameter) in the power output jack "DC OUT" of the movie camera (Fig. 8). (In this case, read the operating instructions for the movie camera before making the connection.) If you do not wish to supply power from the movie camera, insert the power input plug in its holder (Fig. 9).

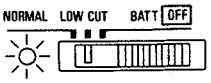


(Fig. 4) (Fig. 5) (Fig. 6)



(Fig. 7) (Fig. 8) (Fig. 9)

5. Can be mounted with the Shoe Adaptor VW-SK2E or VW-SK3E (optional).



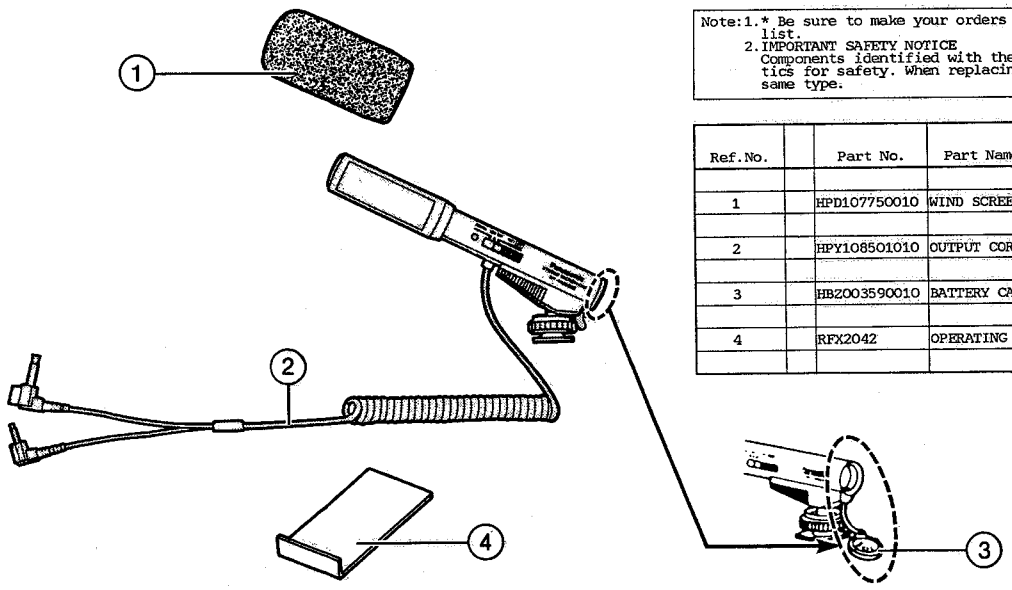
Flashes for a second.

(Fig. 10)

Notes:

- To prevent switching noise, set the switch to Normal or Low-cut before shooting (audio and video recording). Switch it off after shooting. If the position of the switch is changed during shooting, the switching noise may be recorded.
- In very bright locations, the battery check, if it is lit, may not be visible.

EXPLODED VIEWS



PARTS LIST

Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		HPD107750010	WIND SCREEN	1	[SUPPLIED FROM A.D.]
2		HPY108501010	OUTPUT CORD	1	[SUPPLIED FROM A.D.]
3		HBZ003590010	BATTERY CASE	1	[SUPPLIED FROM A.D.]
4		RFX2042	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM VRD]

MODEL NO: RP-VM70E

OPERATING INSTRUCTIONS

FEATURES

- This is a compact, Secondary Sound Pressure Gradient Type Microphone especially suitable for use with a movie camera.
- The microphone is equipped with an Operate/Sensitivity Switch that can boost sensitivity by up to about 4 times.
- Microphone unit floating construction effectively reduces vibration noise.
- Battery check function to check remaining battery power.
- Wind Screen to reduce wind noise.
- Curl type Output Cord for easy handling.
- Ball Joint System for flexible setting (approx. 35° vertical, 180° horizontal).

BATTERY INSTALLATION

1. Grip both sides of the Battery Case, and twist in the direction of the arrow (←OPEN) to remove the lid (Fig. 1).
2. Insert a UM4 (R03/LR03/"AAA" size or equivalent) battery into the case from the "+" end as indicated by the polarity markings on the Battery Case Lid (Fig. 2).
3. Replace the Battery Case Lid by the reverse of the procedure used to remove it (Fig. 3).

Press and turn

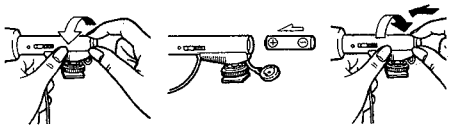


Fig. 1 Fig. 2 Fig. 3

ATTACHING TO MOVIE CAMERA

1. Turn the Fixing Screw in the direction of the arrow to loose the Camera Shoe (Fig. 4).
   The mark ↑ FRONT is marked on the bottom of the Camera Shoe. Slide the Camera Shoe into the Accessory Shoe so that the direction of the arrow is facing towards the front of the camera (Fig. 5).
2. Turn the Fixing Screw in the direction of the arrow to fix the microphone. (Fig. 6).

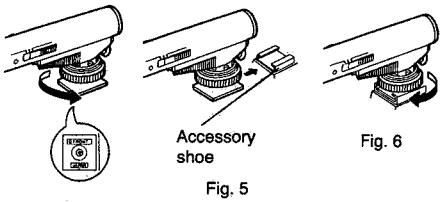


Fig. 4 Fig. 5 Fig. 6

3. Insert the microphone Output Plug into the camera's "Mic Jack".

Note:
When not using the microphone, be sure to remove the Output Plug from the "Mic Jack". If it is not removed, the camera's built-in microphone may not function.

- Some cameras have a special "Shoe Adaptor". For details, consult the camera Operating Instructions.
- If the camera does not have an Accessory Shoe, use optional Panasonic Accessory Shoe. (VW-SK2E or VW-SK3E).

OPERATING THE UNIT

1. Use of Operate/Sensitivity Selector Switch:

- To operate the microphone, set the Operate/ Sensitivity Selector Switch to the "LO" or "HI" position. When not using the microphone, be sure to return the switch to "OFF".
- To pick up distant or weak sounds more clearly, set the switch to the "HI" position, for near or loud sounds, set the switch to the "LO" position (Fig. 7).
- When the switch is slid from the "OFF" position to the "LO" Position, the Battery Check Indicator will briefly light up (Fig. 8).
  If it does not light up, the battery is run out and should be replaced with a new one.

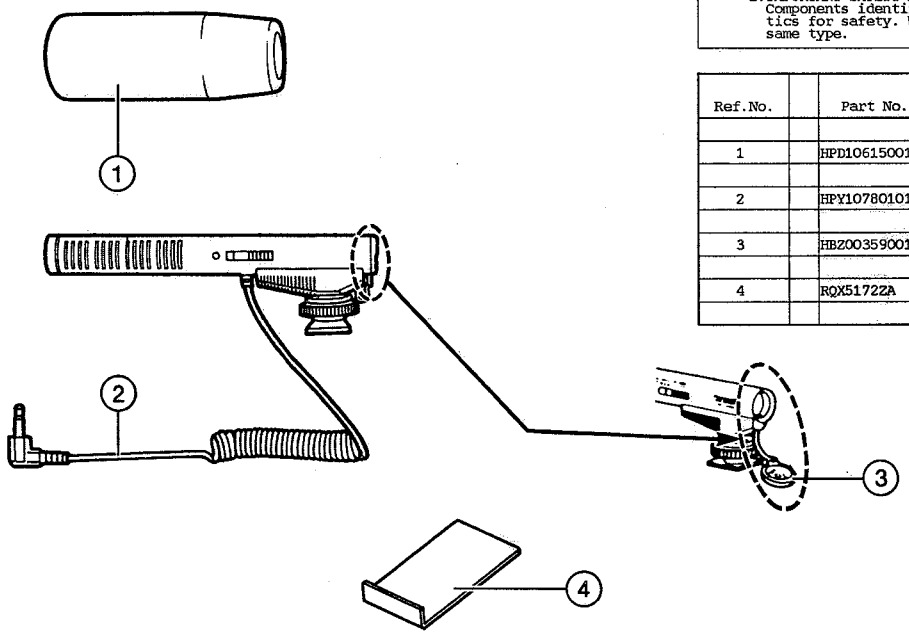
Fig. 7 Fig. 8

2. Use of Wind Screen
The Wind Screen is used to prevent rumbling noise due to wind when the microphone is used outdoors. Push it all the way down over the microphone.

Notes:

- To prevent switch noise, set the Operate/ Sensitivity Switch to the "HI" or "LO" position before starting filming (recording). When filming (recording) has finished, set the switch to "OFF". If the switch is operated during filming (recording), noise may be recorded.
- It may be difficult to see the Battery Check Indicator in a very bright location.

EXPLODED VIEWS



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1		HPD106150010	WIND SCREEN	1	[SUPPLIED FROM A.D.]
2		HPY107801010	OUTPUT CORD	1	[SUPPLIED FROM A.D.]
3		HBZ003590010	BATTERY CASE	1	[SUPPLIED FROM A.D.]
4		RQX5172ZA	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM VRD]

MODEL NO: RP-VM130E

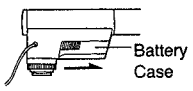
OPERATING INSTRUCTIONS

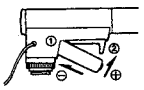
FEATURES

- This microphone has a zoom function which varies its pick-up characteristics continuously from Uni-Directional to Super Directional (Secondary Sound Pressure Gradient Type, high sensitivity approx. 4 times.)
- Microphone unit floating construction effectively reduces vibration noise.
- Battery check function to check remaining battery power.
- Wind Screen to reduce wind noise.
- Low-Cut Switch for further reduction of wind noise when using Wind Screen.
- Curl type Output Cord for easy handling.

BATTERY INSTALLATION

1. Press both sides of the Battery Case, and slide in the direction of the arrow until the lock loosens.
2. Insert a UM3 (R6P/LR6/"AA" size or equivalent) battery from the "–" end into the case of the unit in accordance with the polarity markings, and press the "+" end in.
3. Replace the Battery Case by the reverse procedure to that used in removing it.





ATTACHING TO MOVIE CAMERA

1. Turn the Fixing Screw in the direction of the arrow to loose the Camera Shoe (Fig. 1).
   Next, slide the Camera Shoe into the Accessory Shoe (Fig. 2).
2. Turn the Fixing Screw in the direction of the arrow to fix the microphone. (Fig. 3).
3. Insert the microphone Output Plug into the camera's "Mic Jack".

Notes:
When not using the microphone, be sure to remove the Output Plug from the "Mic Jack". If it is not removed, the camera's built-in microphone may not function.

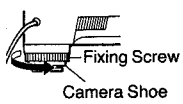


Fig. 1

Fig. 2

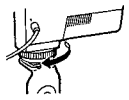
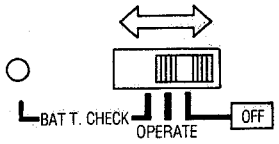


Fig. 3

OPERATING THE UNIT

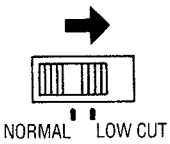
1. **Use of Operate Switch**
   - To operate the microphone, set the control to the "OPERATE" position.
   - The Operate Switch has a check position to check the remaining battery power. When the switch is in the "BATT. CHECK" position, the Battery Check Indicator lights up. If it does not light up, the battery is run out and should be replaced with a new one. The switch automatically returns to the "OPERATE" position when it is released.



Notes:
- To prevent switch noise, set the Operate Switch to the "OPERATE" position before starting filming (recording) and set it to the "OFF" position after filming (recording) has finished.
- If the switch is shifted to the "BATT. CHECK" position during recording, a slight noise may be recorded.
- It may be difficult to see the battery indicator in a very bright location.
- If the camera does not have an accessory shoe, use optional Panasonic Accessory Shoe (VW-SK2E or VW-SK3E).

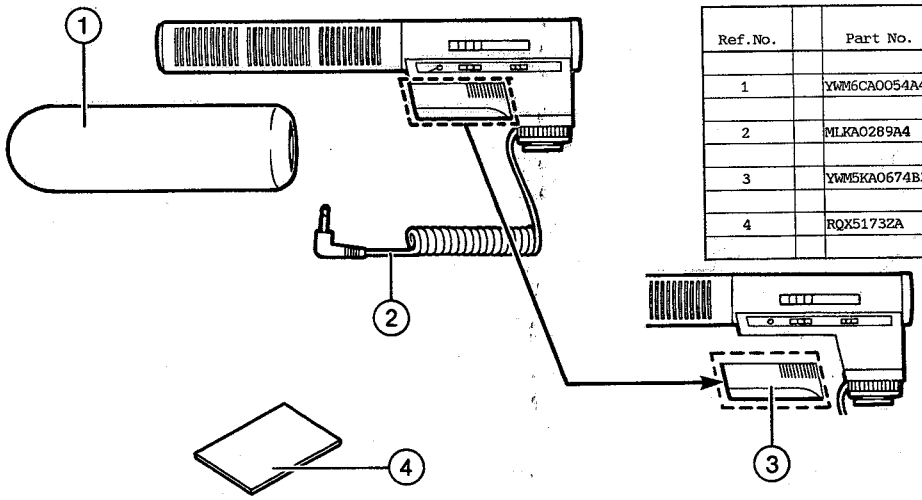
2. **Use of Wind Screen**
   The Wind Screen is used to prevent rumbling noise due to wind when the microphone is used outdoors. Push it all the way down over the head case.

3. **Use of Low Cut Switch**
   If there is wind (when using the microphone outdoors), this switch can be used with the Wind Screen to effectively reduce wind noise.



4. **Zooming (Use of Zoom Control)**
   When the Zoom Control is in the "⊖" position, the microphone has a wide directional angle and a low sensitivity, when the control is in the "⊂⊃" position, the microphone has a narrow directional angle and about 4 times higher sensitivity. By using this control, therefore, both directional angle and sensitivity can be varied continuously.
   For distant sounds or to pick up specific sounds with more clarity, set the control to the "⊂⊃" position, for close sounds or when picking up sounds from the whole environment, set it to the "⊖" position.

EXPLODED VIEWS



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Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		YWM6CA0054A4	WIND SCREEN	1	[SUPPLIED FROM A.D.]
2		MLKA0289A4	OUTPUT CORD	1	[SUPPLIED FROM A.D.]
3		YWM5KA0674B3	BATTERY CASE	1	[SUPPLIED FROM A.D.]
4		RQX51732A	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM VRD]

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